

**DESY Theory Workshop 2011**  
**“Cosmology meets Particle Physics: Ideas & Measurements”**  
**September 27 – 30, 2011**

**Web page:** <http://th-workshop2011.desy.de/>

**PLENARY SESSION: Tuesday, September 27, 2011, Auditorium, Bldg. 5**

Chair: V. Mukhanov

14.15 - 14.25	<b>M. Diehl</b> (DESY)	Welcome
14.30 - 15.10	<b>A.A. Starobinsky</b> (Moscow)	Nonperturbative effects in inflation
15.15 - 15.55	<b>M. Shaposhnikov</b> (Lausanne)	Cosmological inflation and the Standard Model
16.00 - 16.30	Coffee Break	

Chair: A. Ringwald

16.30 - 17.10	<b>A. Vikman</b> (CERN)	Cosmology with Galileons
17.15 - 17.55	<b>P. Wells</b> (CERN)	New discoveries at the LHC
18.00 - 19.30	RECEPTION	

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**PLENARY SESSION: Wednesday, September 28, 2011, Auditorium, Building 5**

Chair: M. G. Schmidt

09.00 - 09.40	<b>J. Dunkley</b> (Oxford)	Cosmology from the small-scale CMB
09.40 - 10.20	<b>L. McAllister</b> (Cornell)	Universality in D-brane inflation
10.20 - 11.00	<b>S. Zaroubi</b> (Groningen)	The redshifted 21cm radiation as a cosmological probe
11.00 - 11.30	Coffee Break	

Chair: A. Hebecker

11.30 - 12.10	<b>A. Lindner</b> (DESY)	An experimental expedition into a new particle habitat at smallest masses
12.15 - 12.55	<b>B. Wandelt</b> (Paris)	Fundamental Physics from CMB and Large Scale Structure space missions
13.00 - 14.00	LUNCH	

**PARALLEL SESSIONS: Wednesday, September 28, 2011, Audit., Sem. rs. 1+2**

14.00 - 17.20 see separate program

**HEINRICH HERTZ LECTURE: 17.30, Auditorium, Bldg. 5**  
**Prof. Dr. T.T. Yanagida & (IPMU, Tokyo)**  
**The Origin of Matter**

**WELCOME BUFFET: 19.00, DESY Bistro/Canteen, Bldg. 9**

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**PLENARY SESSION: Thursday, September 29, 2011, Auditorium, Building 5**

Chair: G. Hiller

09.00 - 09.35	<b>P. Schleper</b> (Hamburg)	Tba
09.35 - 10.10	<b>C. Weinheimer</b> (Münster)	Direct dark matter searches
10.10 - 10.45	<b>M. Cirelli</b> (CERN)	Indirect searches for dark matter: experimental status and theory de- velopments
10.45 - 11.15	Coffee Break	

Chair: M. Beneke

11.15 - 11.50	<b>P. Di Bari</b> (Southampton)	Testing New Physics with leptogenesis
11.50 - 12.25	<b>B. Garbrecht</b> (Aachen)	What can be learnt from the Closed Time Path Approach to leptogenesis
12.25 - 13.00	<b>I. Kirsch</b> (DESY)	Anomalous parity violation, chiral magnetic effect and holography
13.00 - 14.00	LUNCH	

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14.00 - 19.00 see separate program

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**PLENARY SESSION: Friday, September 30, 2011, Auditorium, Building 5**

Chair: G. Sigl

09.00 - 09.40	<b>B. Schutz</b> (Golm)	Gravitational wave explorations of cosmology
09.40 - 10.20	<b>K. Danzmann</b> (Hannover)	Gravitational wave detectors on the ground and in space
10.20 - 11.00	<b>A. H. Chamseddine</b> (Beirut)	Noncommutative geometry in particle physics
11.00 - 11.30	Coffee Break	

Chair: W. Buchmüller

11.30 - 12.10	<b>T. Konstandin</b> (CERN)	Implications of cosmological phase transitions
12.10 - 12.50	<b>V. Mukhanov</b> (Munich)	Classical dimensional transmutation and confinement
12.50	CLOSING	